

Approved For Release 2002/09/03 : CIA-RDP75B00285R000200140083-4

SECRET

(When Filled In)

FILE INFO

REPRODUCTION PROHIBITED

ACTION	1	6	11	16
	2	7	12	17
	3	8	13	18
	4	9	14	19
	5	10	15	20

INFL

NNNS E C R E T 231722Z OCT 70 CITE

25X1A

IDEALIST

SUBJECT: SYSTEM 20

REFERENCE: TELECON [] OF 22 OCT 1970

1. IN REFERENCE TELECON IT WAS REQUESTED THAT [] DEVISE A METHOD OF REDUCING SENSITIVITY TO EFFECT A 20 PERCENT REDUCTION IN RANGE FOR SYSTEM 20 [] TO COMPENSATE FOR DIFFERENCE IN SUMMER AND WINTER ATMOSPHERE.

2. INFORMATION CONTAINED IN [] ATMOSPHERIC TRANSMISSION STUDY, SUBMITTED AS ENCLOSURE (1) TO PROGRAM MONTHLY SUMMARY REPORT FOR PERIOD 16 FEBRUARY TO 15 MARCH 1970 INDICATES CHANGE OF ATMOSPHERE AT THAT LOCATION SHOULD NOT CAUSE A 20 PERCENT INCREASE IN RANGE. IT INDICATES THAT THE SEASONAL DIFFERENCE IN ATMOSPHERIC TRANSMISSION BETWEEN WINTER AND SUMMER SHOULD BE LESS THAN 8 PERCENT WITH AN EFFECT ON RANGE OF LESS THAN 5 PERCENT.

3. TO ACHIEVE 20 PERCENT REDUCTION IN RANGE THE MAFD SHOULD BE APPROXIMATELY 0.40×10 TO THE MINUS ELEVEN W/CM SQUARED, OR A REDUCTION IN SYSTEM SENSITIVITY OF APPROXIMATELY 35 PERCENT (NO ALLOWANCE FOR DIFFERENT ATMOSPHERIC PATH LENGTHS IS INCLUDED). THIS REDUCTION IN SENSITIVITY CAN BE ACHIEVED BY REDUCING THE AREA OF THE TELESCOPE ENTRANCE APERTURE BY 35 PERCENT.

Approved For Release 2002/09/03 : CIA-RDP75B00285R000200140083-4
CLASSIFIED MESSAGE

SECRET

(When Filled In)

FILE INFO

REPRODUCTION PROHIBITED

ACTION	1	6	11	16
	2	7	12	17
25X1A	3	8	13	18
	4	9	14	19
	5	10	15	20

NNNPAGE 2 S E C R E T

4. EACH SYSTEM IS PROVIDED WITH FIVE TELESCOPE ENTRANCE APERTURES. WHEN A SYSTEM IS CALIBRATED, THE APPROPRIATE APERTURE IS INSTALLED IN THE SYSTEM. THE REMAINING APERTURES ARE CONTAINED IN AN ENVELOPE IN THE SYSTEM LOGBOOK RETAINED WITH EACH SYSTEM. THE APERTURES ARE GRADUATED IN 10 PERCENT TRANSMISSION INCREMENTS FROM APPROXIMATELY 90 PERCENT TRANSMISSION TO APPROXIMATELY 50 PERCENT TRANSMISSION AS FOLLOWS:

PART NO.	PERCENT TRANS.	COLOR
1277965-1H	50	BROWN
1277965-2	60	RED
1277965-3	70	ORANGE
1277965-4	80	YELLOW
1277965-5	90	GREEN
NO APERTURE	100	N/A

5. BASED ON RAW DATA FROM FIELD CALIBRATIONS ON DATES INDICATED, AND ASSUMING THAT DATA WAS TAKEN WITH NO APERTURE INSTALLED, IT IS SUGGESTED THAT THE APERTURES INDICATED BELOW BE INSTALLED IN SYSTEMS NOW AT AFTER THE APERTURE IS INSTALLED THE SYSTEM SHOULD BE CALIBRATED AND APERTURE CHANGED AS NECESSARY TO ATTAIN AN MAFD OF 2.40×10 TO THE MINUS ELEVEN W/CM SQUARED.

25X1A

Approved For Release 2002/09/03 : CIA-RDP75B00285R000200140083-4
CLASSIFIED MESSAGE

SECRET

(When Filled In)

FILE INFO

REPRODUCTION PROHIBITED

ACTION	1	6	11	16
	2	7	12	17
	3	8	13	18
25X1A	4	9	14	19
	5	10	15	20

PAGE 3 **SECRET**

RECOMMENDED APERTURE

FOR 45 PERCENT DEGRADATION

SYSTEM S/N

CALIBRATION DATE

TIVITY REDUCTION

003

9-2-70

- 3

006

7-29-70

- 2

009

8-6-70

- 1

SECRET

BT